

2. Data Analysis Summary

2.a. Social Setting

2.a.1. Historical Uses

In the late nineteenth century, the westward expansion of the Union Pacific Railroad relied on local forests as a source of timber for railroad ties. “Tie-hacks” would harvest timbers from Wyoming forests and stockpile them in the river ways until spring runoff when the river flows were high enough to carry the logs to Green River for railroad construction. The loss of trees and vegetative cover in the upper watershed caused increased peak flows in the Upper Green River. The increased flow scoured the river channel, permanently widening and lowering it. The riparian vegetation that grew on the banks of the river was significantly reduced as the river widened. Consequently, the character of Upper Green River area has been permanently altered. Recently there has been an effort by the BLM, Wyoming Game and Fish, and local ranchers to begin restoring the riparian area.

Livestock operations have been grazing this area of the Green River Valley for 12 decades. Presently there are three grazing allotments within the Upper Green River SRMA. Livestock grazes within these allotted areas from May until July, with the majority of the cattle being moved out of the area by mid-June. The recreation and livestock use seasons overlap a small amount, but minimal conflicts occur. Some recreation users have expressed some displeasure with the presence of livestock, but have not reported any major conflict. Livestock operators have not expressed compatibility concerns with recreation use.

2.a.2. Current Uses

The majority of recreation activity in the Upper Green River SRMA occurs in late spring/early summer and fall. The spring/summer season usually begins on Memorial Day with peak use occurring in mid to late June. The level of activity during this period is directly influenced by limited access to recreation areas at higher elevations and water quality/quantity. High snowmelt volumes in late spring cause the water clarity to drop, which is not conducive to fishing. Once the water clarity improves, which occurs after Memorial Day, the recreation levels in the area begin to increase.

User groups in this season typically include commercial outfitters and clients, private day-users and extended-stay users. The principal summer (June-August) recreation uses include commercial guided and private float fishing, small and large private group camping (primitive and RV), canoeing and bank fishing.



Recreational vehicle (RV) use is popular within the SRMA. RVs are defined as motorized camper vehicles (motor homes) and pull-behind pop-up or large camping trailers (“fifth-wheels”). The typical length of these vehicles range from 45 feet up to 75 feet depending on whether the vehicle is a self contained motor home or a combination of a pull behind camper/trailer towed by a passenger vehicle or larger pick-up. Regardless of the fact that there is a developed RV campground at Warren Bridge west of Highway 189/191 and a sign warning of poor road conditions, RV users venture into the Upper Green River SRMA to find a more secluded setting near the river. The SRMA is a free-use site (no fee) which also contributes to area use.

People also canoe, mountain bike, ride all terrain vehicles (ATVs), bird and wildlife watch, picnic, ride horses and hike in the area.

Camping levels begin to taper off after July when United States Forest Service recreation facilities located at higher elevations become accessible. Commercial float fishing continues into September, but decreases considerably as water conditions on other nearby rivers improve and the outfitters begin using these resources.

After Labor Day, the extended-stay and day-use drops off. Hunting season begins in September and lasts through October, bringing another small peak in use to the area. Hunters are attracted to the area for the waterfowl and big game (see [Section 2.b.1. Natural Resources](#)). The majority of the fall hunting season use is day-use type activity.

Winter activities are minimal compared to spring, summer and fall, however, there is some snowmobiling and cross-country skiing. The BLM has received requests for developing a parking facility at the intersection of the BLM access road with Highway 189/191. The parking facility would serve as a wintertime trailhead parking and staging area accommodating winter activities.

An educational activity sponsored by the BLM is the Safari Club interpretive program, which takes place during the summer season. The Safari Club provides teachers and educators from major metropolitan centers an opportunity to learn about the operations and management of public lands. Other educational and instructional programs as well as outdoor adventure groups use the area.

There are two grazing allotments for cattle within the Upper Green River SRMA: the Spade individual allotment and the Buyer Horse Creek individual allotment. The Spade individual allotment encompasses 2,393 acres and operates at a level of 688 Animal Unit Months (AUM) from June 1st through July 2nd. The Buyer Horse Creek individual allotment encompasses 1,726 acres and operates at a level of 351 AUMs from May 27th through July 11th. There are large tracts of private land that bisect the BLM lands. The private lands are generally used for livestock grazing and are fenced from the public land.

A visitor survey was initiated, but was not completed, prior to the development of this RPP. Information that has begun to be gathered includes visitor origin, length of stay, number of people in party etc. An evaluation of the information gathered thus far in the pending survey indicated visitors to the Upper Green River SRMA generally originate from local areas but people also visit from all over the country and from abroad. From within Wyoming visitors come from: Pinedale, Jackson, Riverton, Green River, Moran, Glenrock. From outside Wyoming: Utah, Idaho, Colorado, California, Pennsylvania, Ohio, Maryland, Tennessee, Georgia and Texas and abroad.

Groups participating thus far in the survey report that their length of stay ranges from 1 to 14 days (Figure 4) with group size ranging from 1 to as many as 12 (Figure 5).

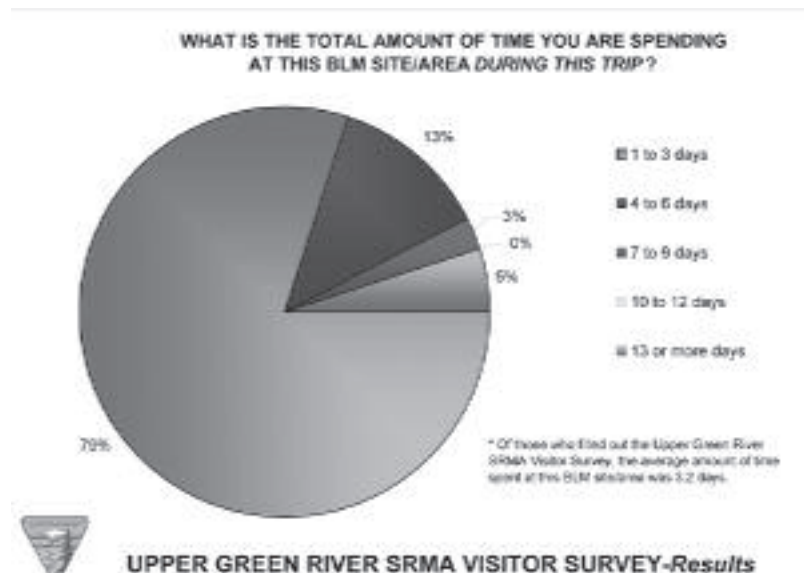
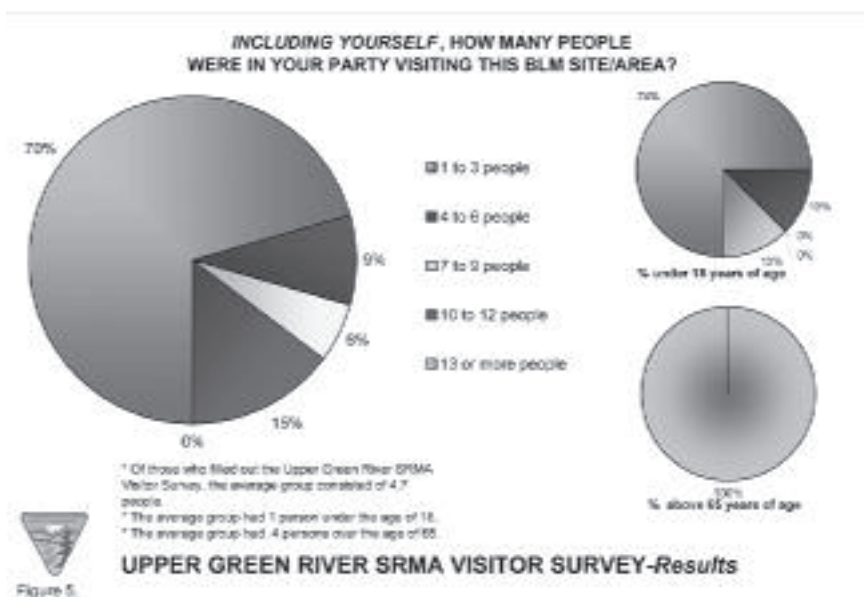


Figure 4.



Visitors from Wyoming, Idaho and Colorado report more than one visit per year with some returning to the site more than 10 visits per year.

Users typically access the area with pick-up trucks, SUVs or RVs. Pull behind trailers, such those mounted with float fishing boats, are common vehicle accessories. Other vehicular use includes ATVs and motorcycles.

2.a.3. Recreation Experience

The Upper Green River SRMA is in close proximity to and accessible from Highway 191. Once off the highway, visitors are immersed in a rustic environment with pristine views of the Wind River Range as a backdrop and the Green River in the foreground. The main access road sits above the Green River corridor and provides glimpses of the river as the visitor progresses along the roadway. Portions of this main access road are steep in grade and are difficult to negotiate in wet conditions, although most vehicles can navigate the road in dry weather.



From the main access road there are ten spur roads that connect to twelve river access sites. To get to these river access points, the visitor descends from between 55 to 170 vertical feet to find themselves in a secluded and scenic river canyon environment. Signing at pertinent main access/spur road intersections recommends adequate four-wheel drive vehicles for the descent to the river.

Once within the Upper Green River SRMA there are many diverse recreational opportunities for users to experience. Overnight stays can take the form of car, RV or tent camping. Each site may vary in its appropriateness for different forms of camping. Over-night users have a tendency to seek unoccupied river access sites, tending to spread themselves out along the Green River corridor.

The Green River is the primary recreation attraction. The multiple access sites, combined with unique river characteristics at each site, provide diverse recreational experiences. The multiple recreation opportunities include float



fishing, bank fishing, water sport floating with canoes, rubber tubes and inflatable rafts. Users have multiple opportunities to experience high quality river recreation within a pristine area. Because there are multiple river access sites throughout the Upper Green River SRMA, the area can accommodate a large number of visitors while maintaining a feeling of seclusion and remoteness.

2.a.4. Current and Expected Undesirable Use Patterns

The ten spur roads leading down to the river access areas typically terminate at clearings that are currently located in close proximity to, or on the riverbank. Typically, these clearings serve as campsites, day-use parking and access to boat launch areas. Once campers occupy the area they tend to physically block the boat launch, or create an atmosphere unappealing to day-use visitors. As a result, visitors seeking a location to launch their boats are forced to seek an unoccupied location. During the peak season, accessible launch locations for trailored boats may be difficult to find. Canoes and other light watercraft are launched almost anywhere an adequate gap in riparian vegetation is found, causing damage to surrounding riparian vegetation. The proximity of the campsite and parking areas to the riverbank concentrates users and vehicles near fragile riparian vegetation further placing it at risk of degradation. At many sites there are informal footpaths (“social trails”) and/or game trails that are used for hiking and access to bank fishing. Riverbank foot access, if left unmanaged, will result in the proliferation of these trails, contributing to the degradation of the riparian vegetation. Safe passage to the river access sites is also a concern, as some spur roads cannot safely accommodate large vehicles (motorhomes), or pick-up trucks with large trailers.



Large Groups Can Block Access to the River

Local residents near the Upper Green River SRMA reported during the scoping process that they have witnessed target shooting in the direction of the residential area. This activity presents a safety concern for both contiguous residents and public land users. Target shooting is seen by some as an undesirable activity, and presents a real safety hazard at campsite areas.

2.b. Physical Setting

The Upper Green River SRMA is located at an elevation range of 7,460 to 7,780 feet. The climate is classified as dry mid-continent with an average precipitation rate of 15 to 19 inches. Thirty percent of the annual rainfall occurs between April 1 and June 30. The majority of winter precipitation occurs in January, February and March. Winter temperatures can reach -60°F while summer temperatures generally stay below 90°F. The mean annual temperature for the coldest month recorded is January at 20.3°F and for the warmest is July at 70.9°F. Summers are generally dry with occasional afternoon thunderstorms. Snowfall may occur any month of the year. High wind conditions may be experienced during any season, but most predictably in winter and early

2.b.1. Natural Resources

The Upper Green River lies in a scenic setting on the western slope of the Wind River Mountain range, which abruptly rises to the east forming a dramatic backdrop to the sage covered rolling hills and valleys that dominate the foreground. The Wind River Mountain range is the headwaters for the Upper Green River.

The Upper Green River SRMA lies within an area described as the Intermountain Region. The vegetation here is predominantly Big Sagebrush-Grassland. There are also small areas of aspen and conifer in mixed and pure stands. Riparian vegetation, consisting mainly of willows and sedges forms thin strips along the banks of the Green River. It is speculated that a great percentage of the riparian vegetation was lost due to tie-hacking activity that occurred in the area during the mid to late nineteenth century (for more on tie-hacking see Section 2.a.1 Historical Uses). Most of the riparian vegetation that exists today is the result of a successful restoration effort accomplished by the BLM with local livestock rancher cooperation.

A wide diversity of animals inhabit the sagebrush lands within the Upper Green River SRMA. Within this species range, there are a number that are unique to the sagebrush lands of the American West. Some of the animals that are native to sagebrush lands and are found in the area include: the sage thrasher, sagebrush lizard, pigmy rabbit, sagebrush vole, sage sparrow, brewer's sparrow and the sage grouse. Another sagebrush-land native, the pronghorn antelope, are found in large numbers here as the area provides significant kidding ground. There are documented sage grouse leks, or breeding grounds, in proximity to the Upper Green River SRMA. Many migratory waterfowl and shorebirds inhabit the area from March-October. These species include the Canada goose, many species of dabbling and diving ducks, and trumpeter swans; the largest North American wildfowl. The trumpeter swan is currently registered on the threatened and endangered species list and is extremely rare.



A pronghorn antelope in the Upper Green River SRMA

Chief predators to nesting waterfowl in the area include coyotes, red fox, raccoons, skunks and ravens. Several species of raptor use the Upper Green River SRMA for hunting and/or nesting. These birds include red-tailed hawks, osprey, bald eagles, golden eagles, goshawks, sharp-shinned hawks, marsh hawks, great-horned owls, American Kestrels, and Swanson's hawks. Ospreys are of high public interest as their nesting and feeding habits are easily observed due to numerous nests along the highways on artificial platforms. The area also provides habitat and migration routes to several species of big game, including elk, mule deer and moose. The dominant sport fish in the area are rainbow, cutthroat, and brown trout. The fish habitat along the Upper Green River SRMA was also negatively affected by tie-hacking operations and recently there has been an effort to enhance the fishery. Other wildlife species in the area include beavers, minks, muskrats, river otters, frogs, toads, salamanders and songbirds.

2.b.2. Man-made Elements

Existing facilities include a main access road (BLM Road 5201, dirt) that connects Highway 189/191 to ten spur roads servicing twelve river access/camping sites most of which have a primitive boat launch ramp, pit-toilet, picnic tables and fire-rings. Along BLM Road 5201 there are numerous livestock fences and cattle guards.

From Highway 189/191 approximately the first half of the main access road lies at least 1000' away from the river, sometimes reaching as far away as 3000'. Here the road follows a terrace that is between 40' and 170' above the river. The second half of the road follows the river more closely, sometimes reaching within 100' of the bank. This part of the road still sits 40-55' above the river, however. The main access road is steep in places, with grades reaching upwards of 10%.



The old Warren Bridge

There are 12 river access sites that are reached by ten spur roads. The Spur roads can be quite steep, with some sections reaching in excess of 13% (please refer to Figure 6: River Access Site Physical Assessment).

2.b.3. Functional Relationship Analysis Summary

The Functional Relationship Diagram shows the basic spatial relationships between the proposed use areas and the modes of access between them. The concept is to alleviate access issues by separating extended stay users from the boat launch areas in order to avoid the displacement of day-users. Camping areas within each access site are further variable in size in order to encourage separation of small group/individual/tent extended stay users from large group gatherings. Along the river corridor, users tend to separate out, with larger group/RV users usually frequenting the river access sites nearer the highway and smaller groups/individuals seeking the solitude of the more remote areas. Generally, as users move further from the highway they will experience a more rustic experience, as sites with minimal improvements are located in the upper portion of the SRMA. Maintaining the present character of these sites, which provide closer access to the river, will sustain a user experience that is being discouraged at the more visited sites (1 through 7). Allowing for diversity in experiential opportunities will help distribute the various users throughout the Upper Green River SRMA. However, it should be noted that because these sites will offer a unique experience in the Upper Green River SRMA they may become over-used and should be monitored. If increased visitation begins to impact these sites, then measures similar to those outlined in this RPP need to be implemented.

Three diagrams (Figures 7, 8, and 9) were prepared in order to illustrate how the functional relationships vary depending on the differing characteristics of various sites.

Upper Green River Access Site Physical Assessment

River Access Site	Spur Road Length ¹	Spur Road Average Grade ²	Spur Road Maximum Grade ²	Site Total Usable Area ³	Site Usable Area Outside 200' River Setback Zone	Site Usable Area Outside 500' River Setback Zone
1	1800'	7%	600' @ 13%	19.82 acres	2.4 acres (12%)	0
2	1950'	8.7%	125' @ 13%	3.79 acres	1.12 acres (29%)	0
3	2700'	4.8%	1200' @ 6.6%	16.74 acres	9.95 acres (59%)	2.13 acres (12%)
4	1300'	7%	500' @ 10%	6.5 acres	2.2 acres (34%)	0
5	1200'	5%	5%	13.0 acres	5.9 acres (45%)	.4 acres (3%)
6	3155'	5%	100' @ 13%	48.2 acres	37.3 acres (77%)	9.6 acres (20%)
7	1700'	3.8%	900' @ 7%	28.4 acres	13.7 acres (48%)	0.1 acres (0.3%)
8	464'	5%	20' @ 10%	1.8 acres	0	0
9	300'	10%	100' @ 13%	1.7 acres	.27 acres (15%)	0
10	1701'	1.5%	5%	1.5 acres	.27 acres (17%)	0
11	1002'	6.1%	6.1%	23.9 acres	17 acres (71%)	9 acres (37%)
12	5100'	4.5%	400' @ 5%	16.0 acres	7.6 acres (47%)	0.65 acres (4%)

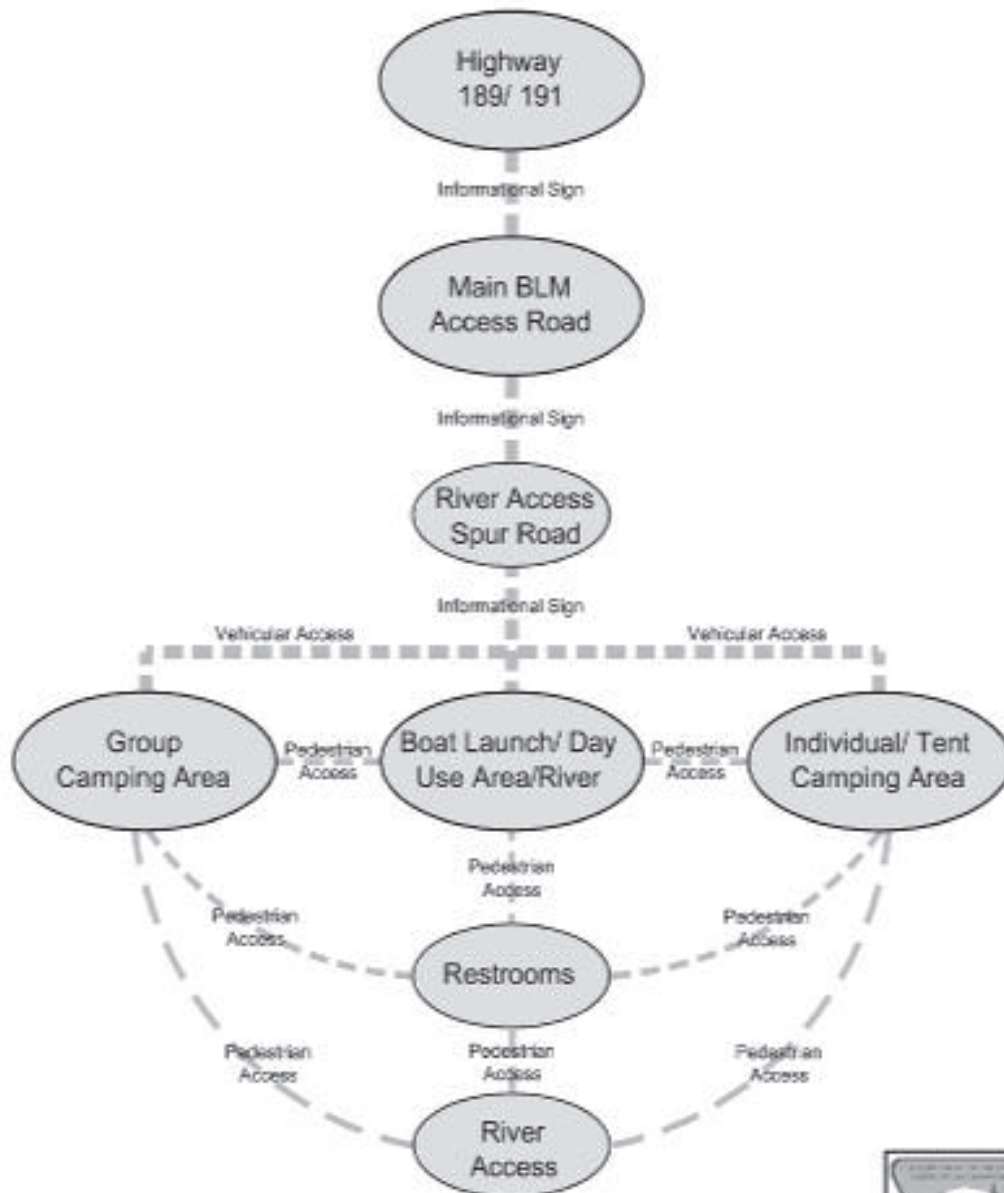
¹ Spur road lengths were approximated from scaled aerial photographs.

² Spur road grades were calculated using GIS slope analysis data and USGS 20' contour maps.

³ Site total usable area was calculated using aerial and ground level photographs and slope data. The usable area generally represents the land that lies between the toe of the upland bluff and the river bank. Within this bottomland area, land reaching a slope of 15% or greater was excluded.

Figure 6

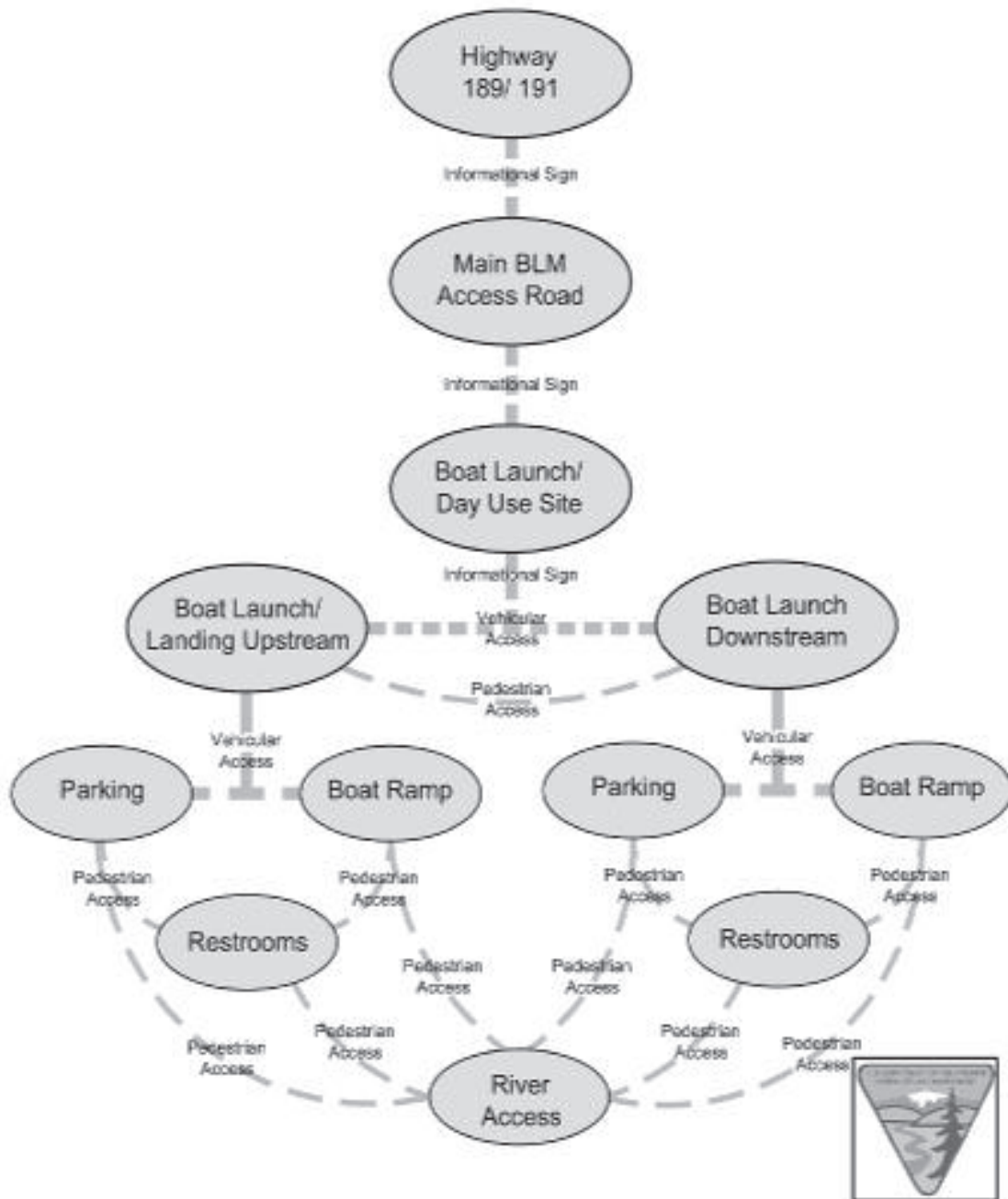
UPPER GREEN RIVER SRMA
PINEDALE, WYOMING FIELD OFFICE
Typical Functional Relationship Diagram: Sites #1-11
MAY 2003



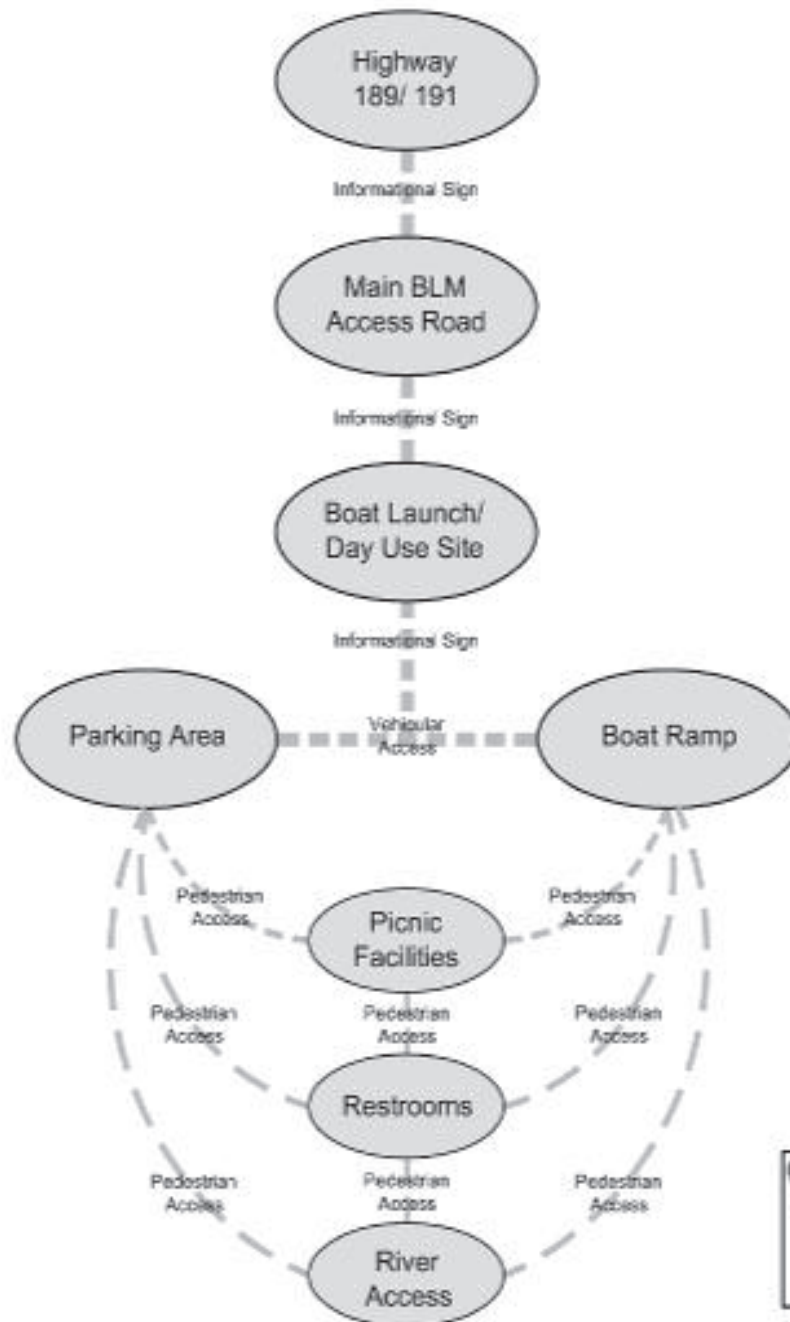
*Not all sites include all functional elements represented in the diagram.



UPPER GREEN RIVER SRMA
PINEDALE, WYOMING FIELD OFFICE
Functional Relationship Diagram: Site #12 - Day Use Site
MAY 2003



UPPER GREEN RIVER SRMA
PINEDALE, WYOMING FIELD OFFICE
Functional Relationship Diagram: Day Use Site
MAY 2003



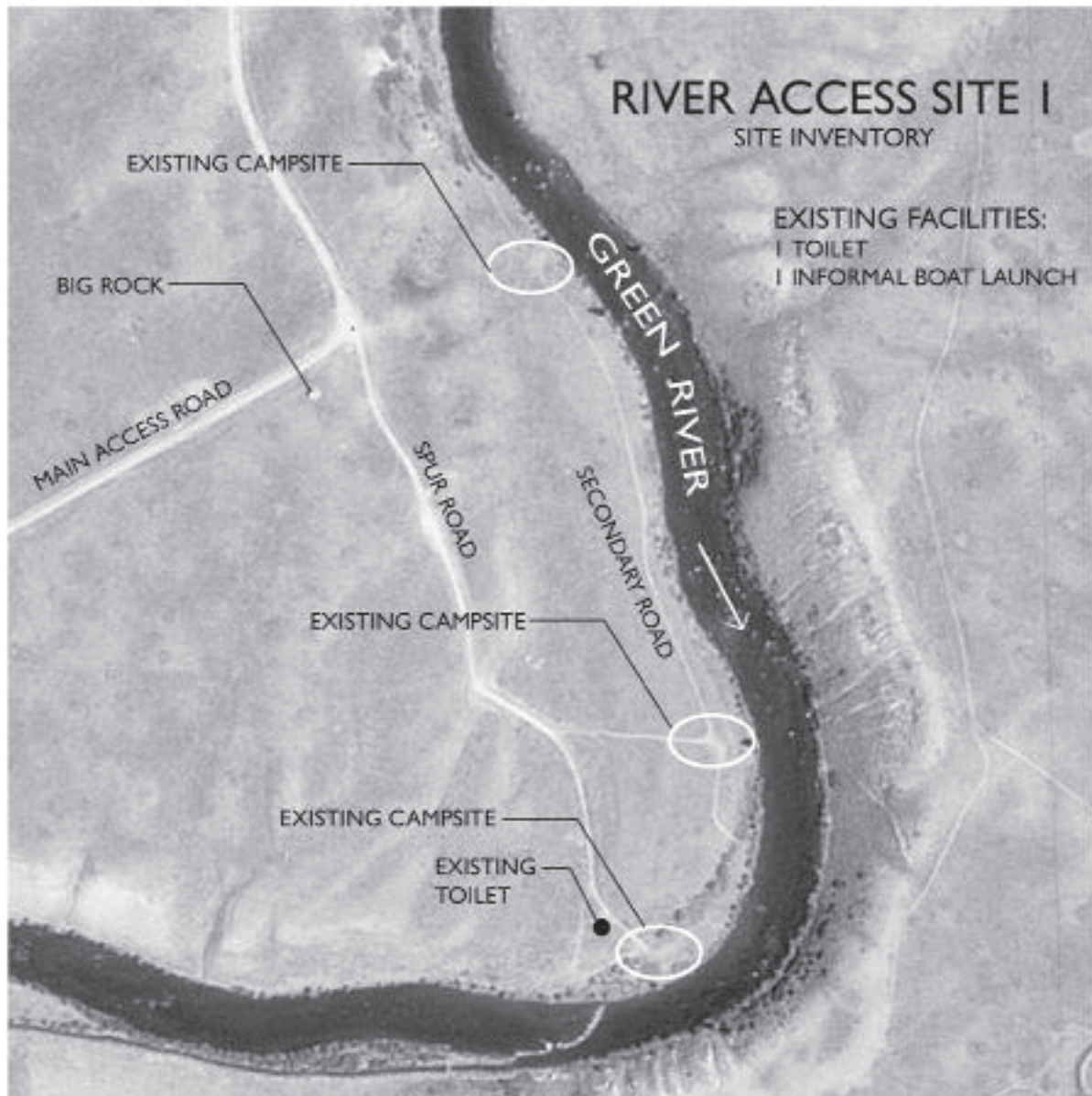


Figure11.

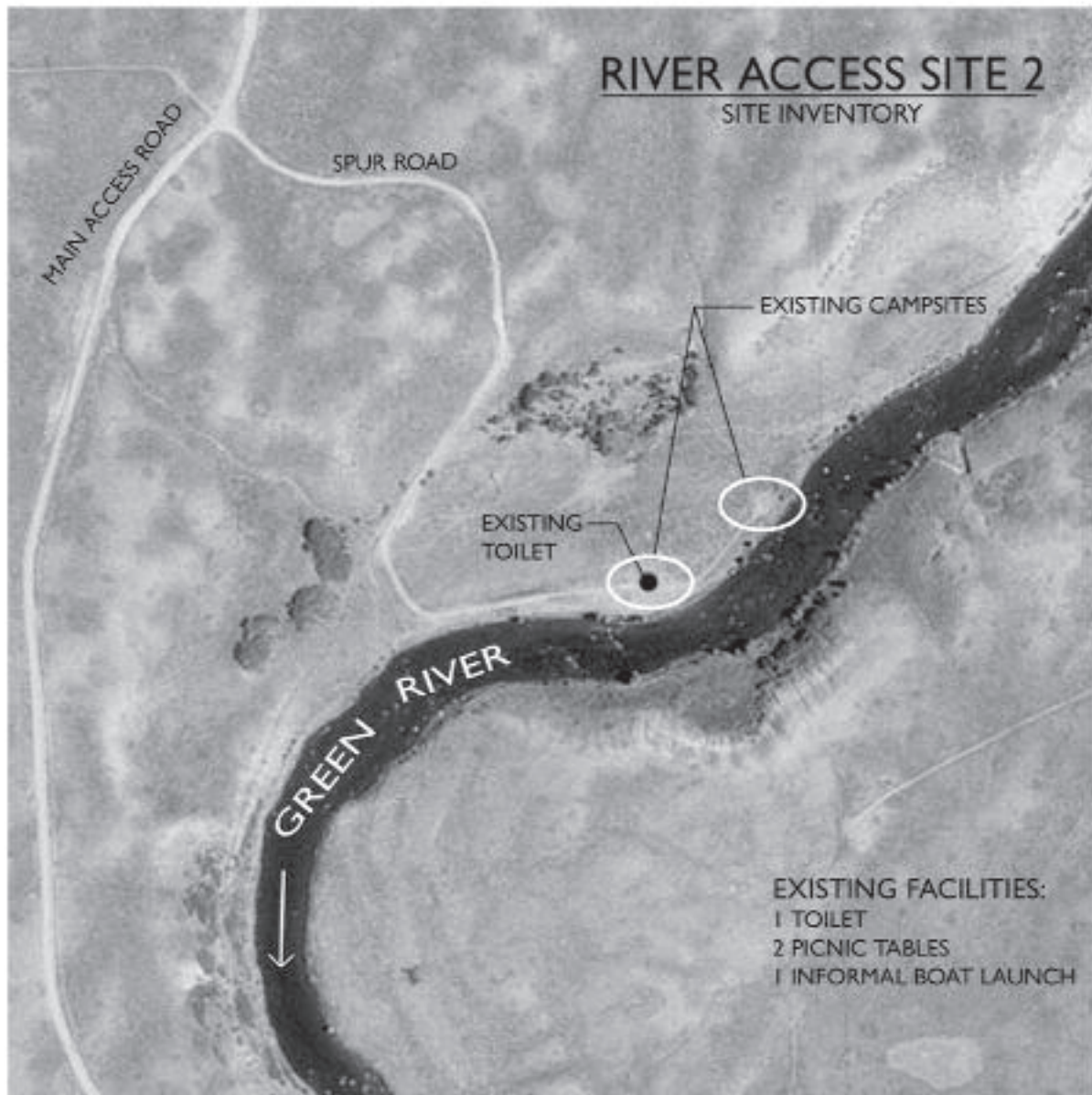


Figure 12.



Figure 13.



Figure 14.

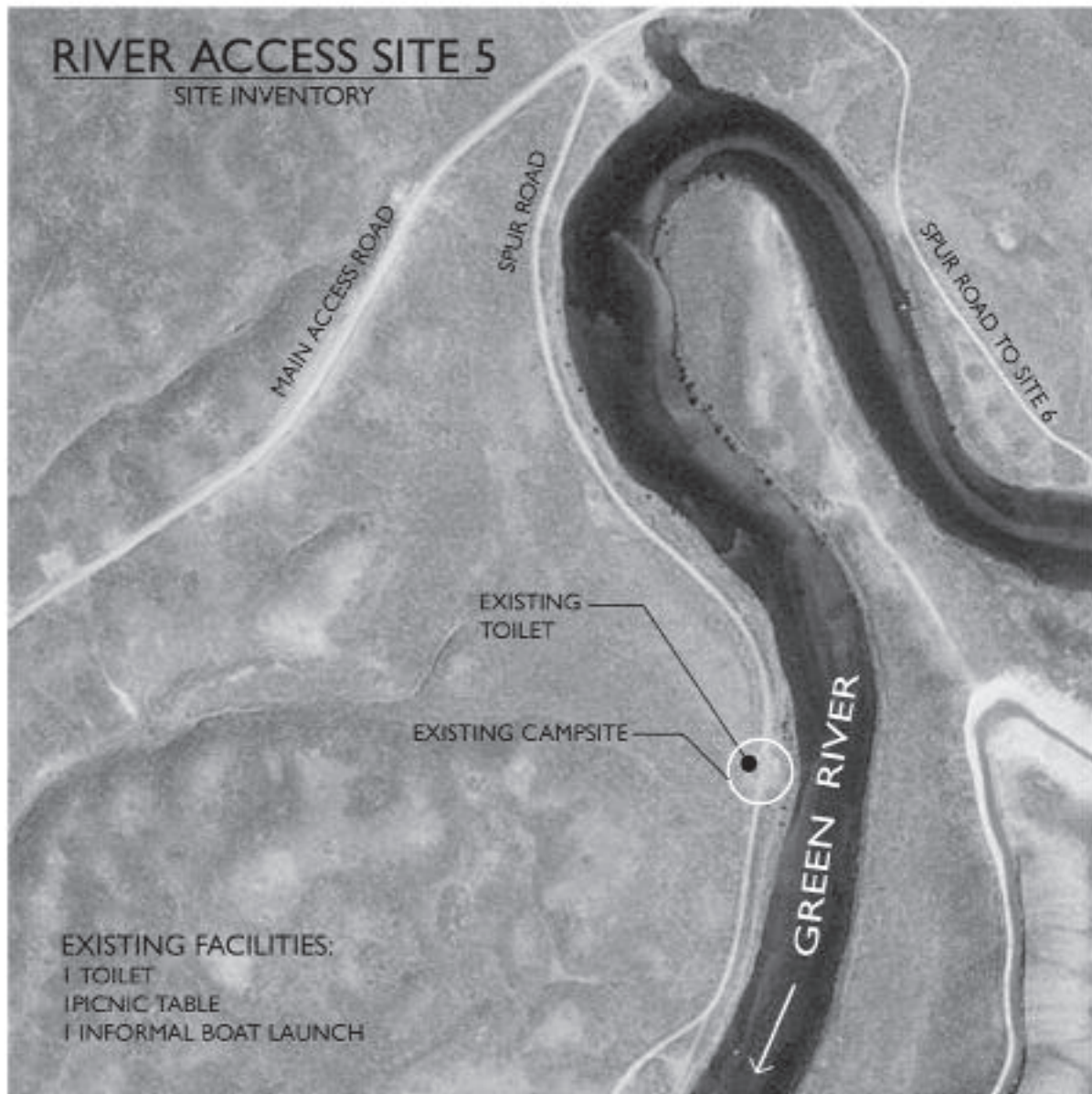


Figure 15.

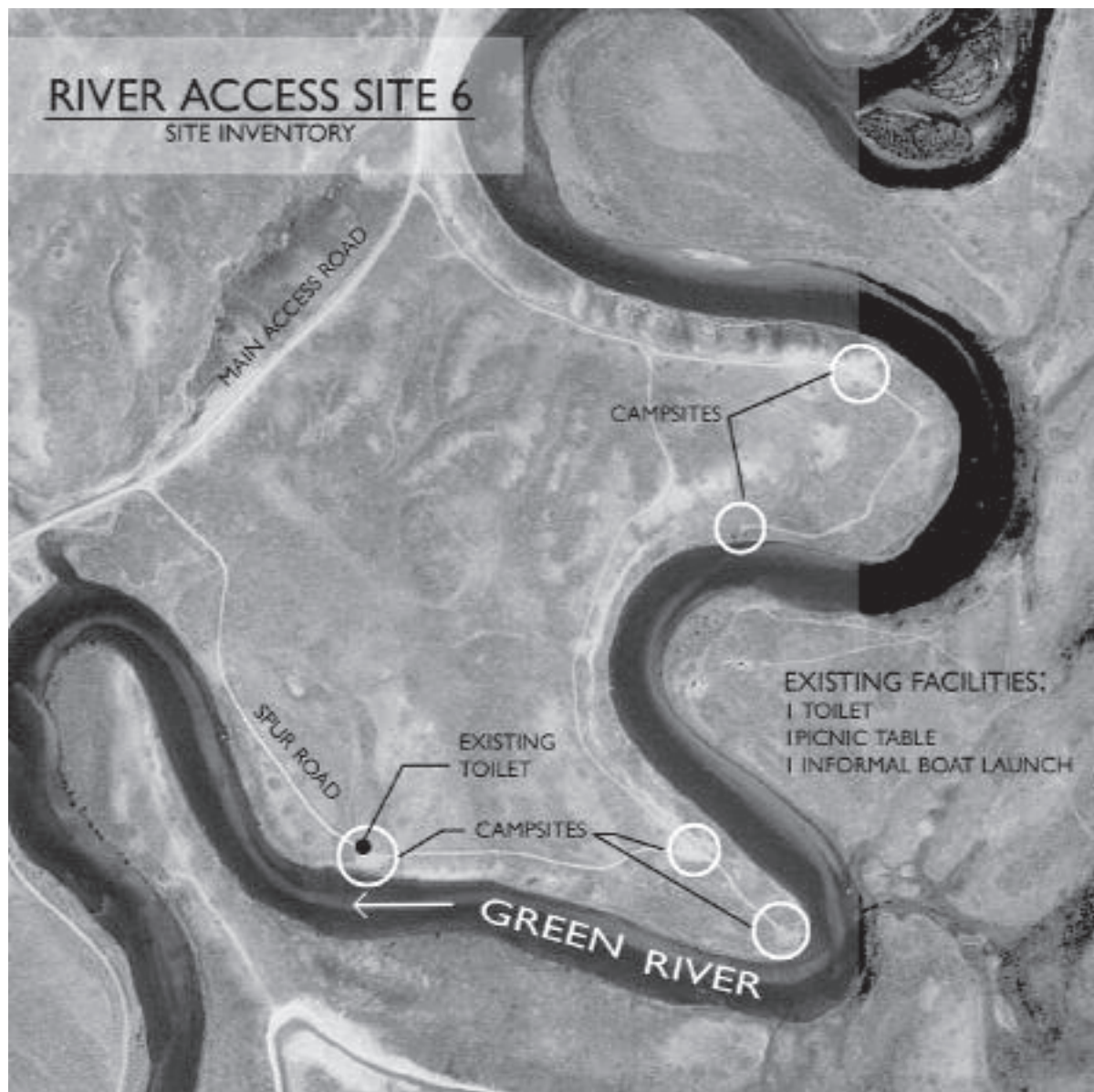


Figure 16.



Figure 17.

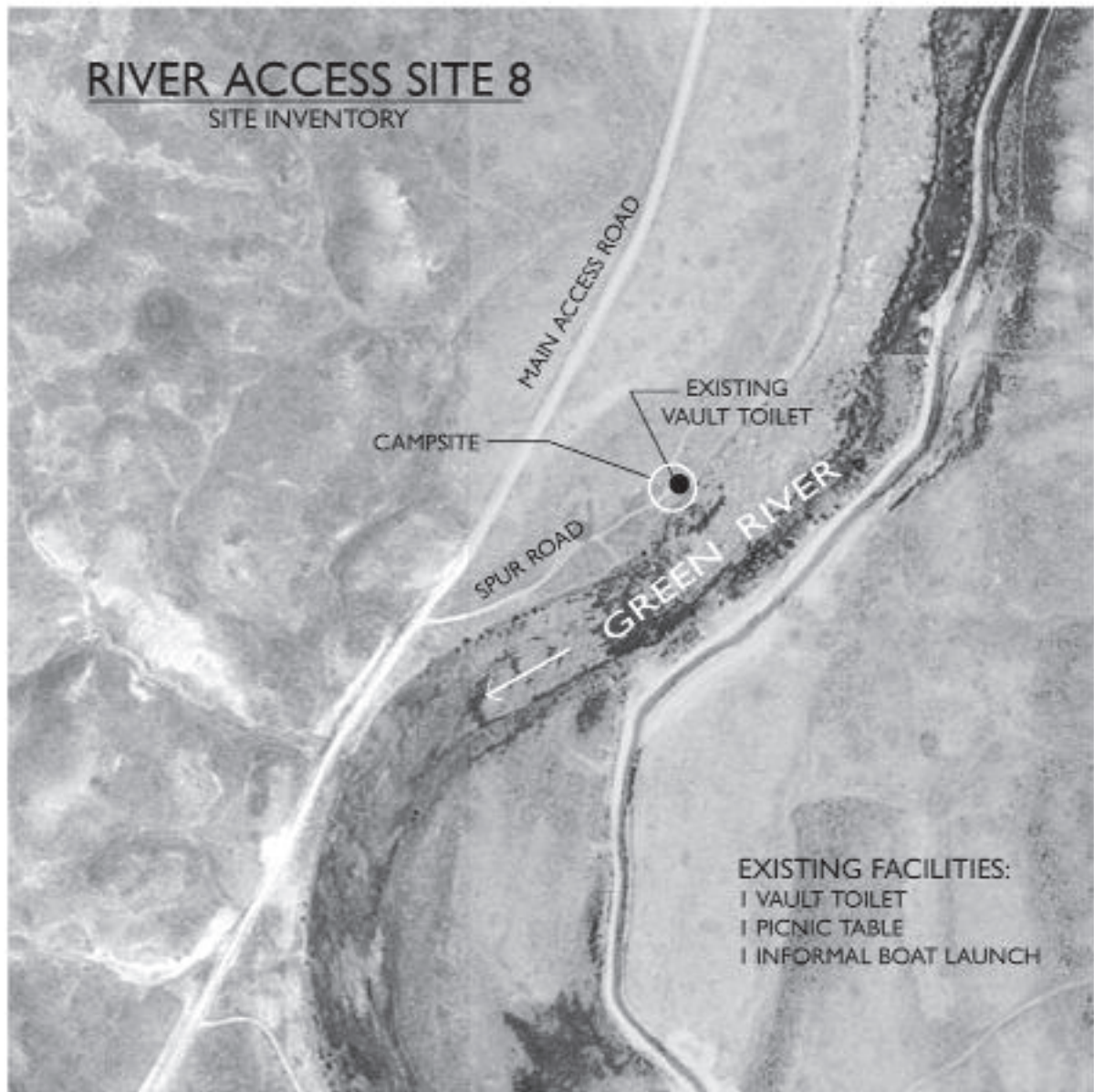


Figure 18.

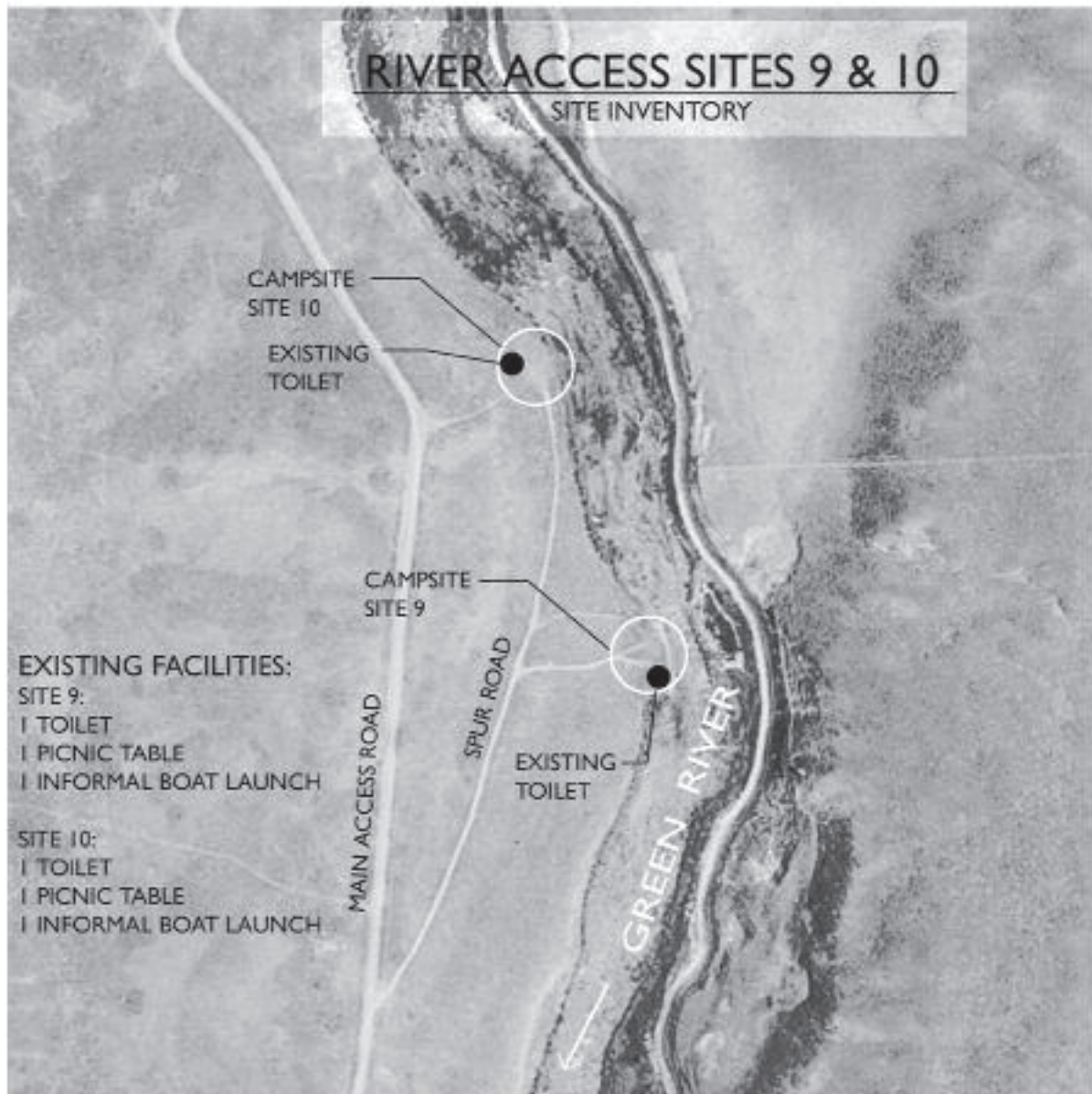


Figure 19.

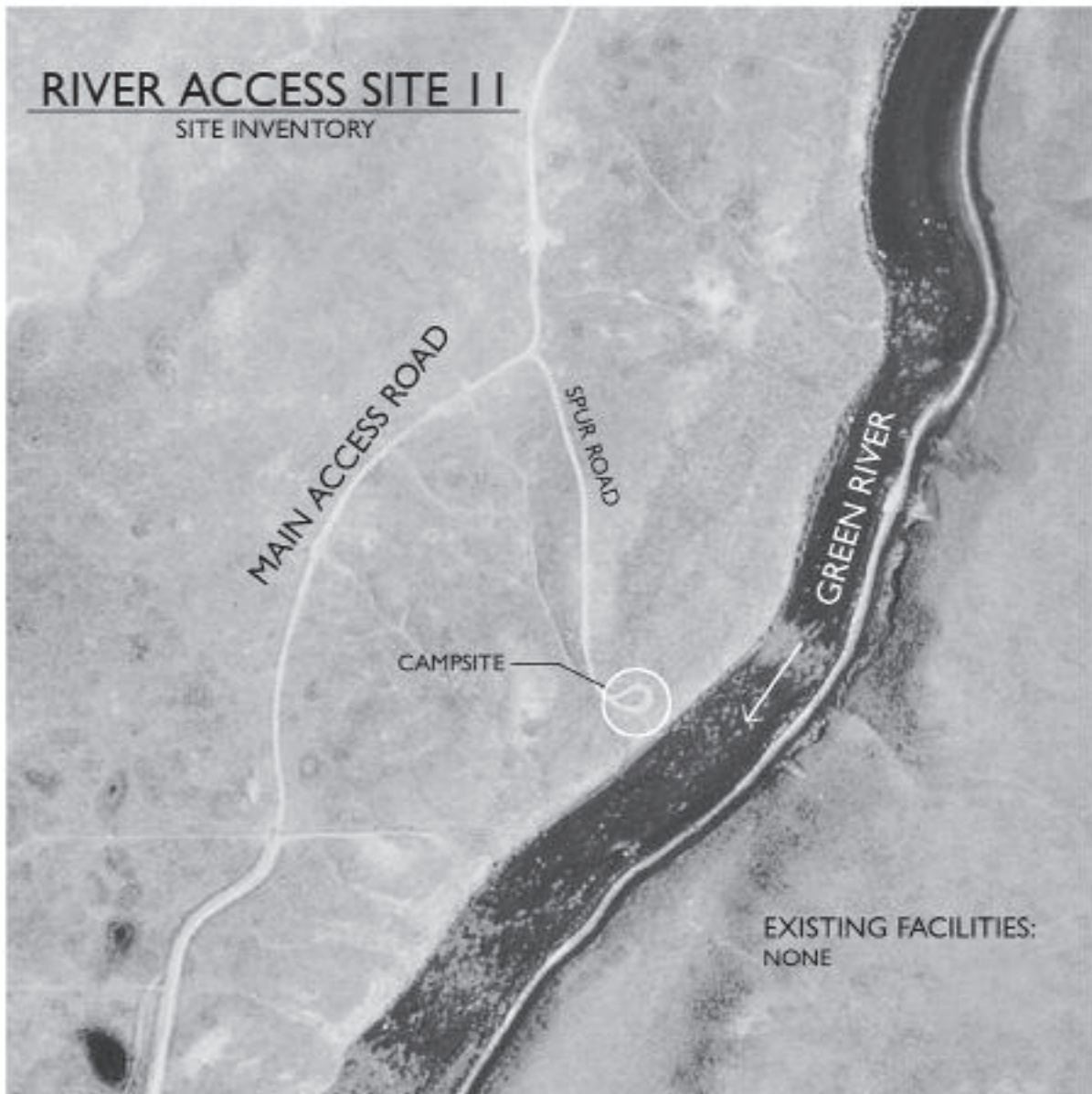


Figure 20.

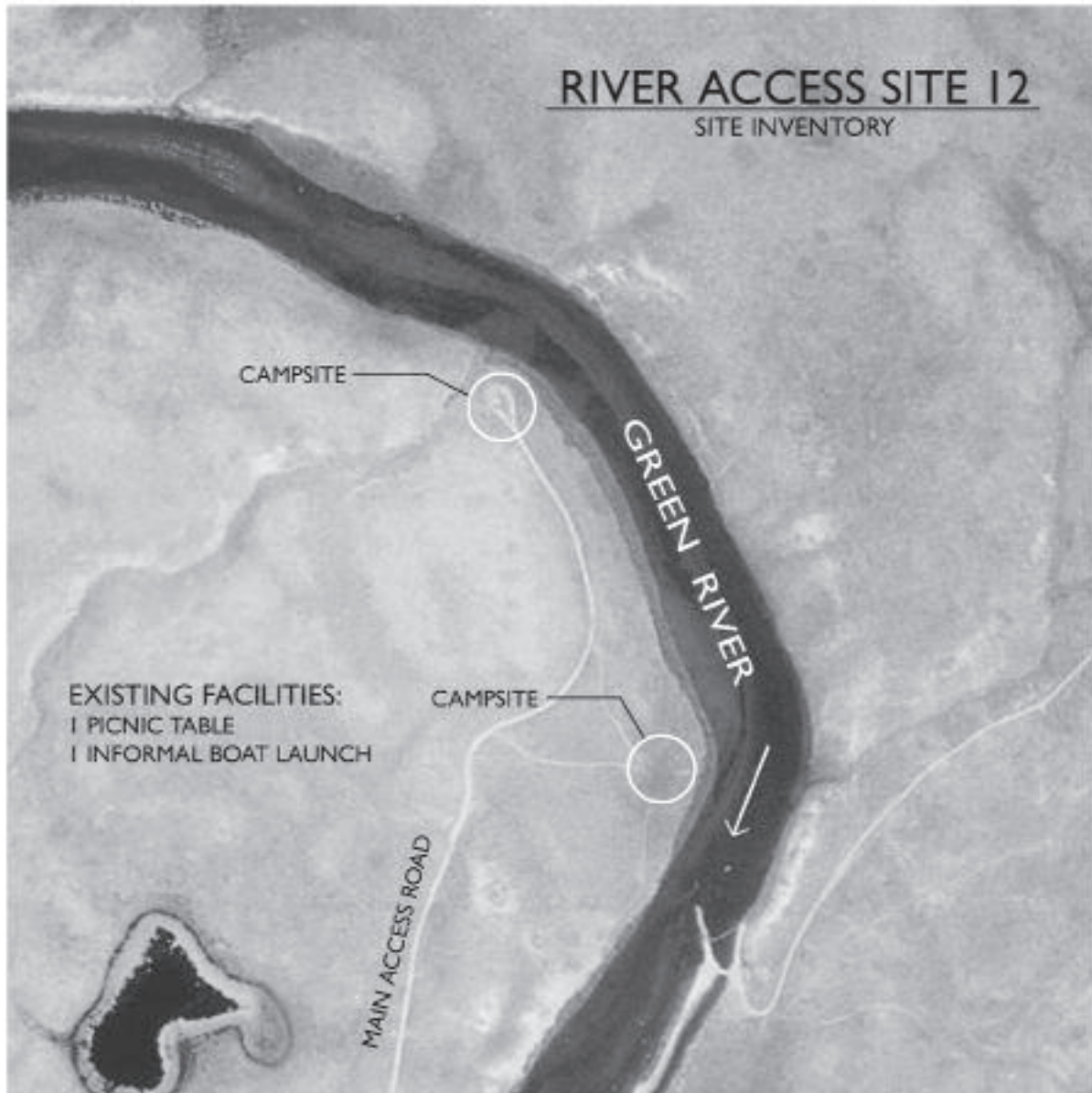


Figure 21.